Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

September 24, 2015

Preliminary Finding of No Significant Impact

Akron - Ohio Canal Interceptor Tunnel (CS390095-0090)
Akron - Ohio Canal Interceptor Tunnel OCIT-1CS (CS390095-0087)

The attached Environmental Assessment (EA) is for a wastewater treatment project in your area which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the EA.

Any comments on our preliminary determination should be sent to me at the letterhead address. We will not act on this project for 30 calendar days from the date of this notice in order to receive and consider comments. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Akron can then proceed with its application for the WPCLF loan.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Division of Environmental & Financial Assistance
Office of Financial Assistance

JR/DH

attachment

50 West Town Street • Suite 700 • P.O. Box 1049 • Columbus, OH 43216-1049
epa.ohio.gov • (614) 644-3020 • (614) 644-3184 (fax)

ENVIRONMENTAL ASSESSMENT

A. **Project Identification**

Name: Akron – Ohio Canal Interceptor Tunnel (CS390095-0090)
- Ohio Canal Interceptor Tunnel OCIT-1CS (CS390095-0087)

Address: Michelle DiFiore, PE
Akron Engineering Bureau
166 South High Street, Ste. 700
Akron, OH 44308

B. **Proposed Project**

1. Summary

The City of Akron in Summit County has requested financial assistance from the Ohio Water Pollution Control Loan Fund (WPCLF) to construct a proposed deep tunnel sewer beneath downtown Akron. The project is required in the City's federal Consent Decree to control combined sewer overflows to the Ohio Canal and Little Cuyahoga River from several combined sewer overflows racks in the central downtown area. Akron will use below-market rate loans of approximately $184,100,750 (Ohio Canal Interceptor Tunnel – OCIT) and $7,000,000 (Ohio Canal Interceptor Tunnel Consolidation Sewer – 1CS) from the WPCLF for this project, one of several under construction or proposed that are listed in the Consent Decree.

Much of the older area of Akron has combined sewers, pipes that in dry weather carry sanitary sewage only, and during wet weather carry sanitary flows combined with storm drainage to the Akron Water Reclamation Facility (WRF; Akron's wastewater treatment plant). When flows rise dramatically and fill the combined sewers during and after rainfall, combined sewer overflow (CSO) structures ("racks") divert untreated sanitary sewage mixed with storm water to area streams, threatening human health and aquatic life.

Due to these historical and ongoing CSO events and partial treatment bypasses from the WRF to the Cuyahoga River, Akron is subject to a federal Consent Decree that requires, among other improvements, controlling CSO structures throughout the sewer system and minimization of overflow events. This project and others will control CSO racks throughout the city's sewer system and keep the mixed sewage and storm water in a pipe rather than directly discharge it to streams.

Akron has instituted a multi-year sewer rate increase to pay for this and the other CSO projects.

The Ohio Canal Interceptor Tunnel WPCLF loan will also provide funding for The Nature Conservancy's purchase of 72 acres of Category 3 wetlands (highest quality) as part of the Kitty Todd Wetlands Preserve near Toledo through participation in the Ohio Water Resource Restoration Sponsor Program (WRRSP). The WRRSP helps achieve Ohio's water quality goals by providing funds, through WPCLF sponsoring loans, to finance projects that protect or restore high quality water resources. The Kitty Todd Wetlands land acquisition project will receive approximately $749,000 from this sponsoring loan, using the WRRSP mechanism of advancing a portion of the estimated amount of interest to be repaid by Akron over the life of the Ohio Canal Interceptor Tunnel project loan for acquisition of the Kitty Todd wetlands. The "Kitty Todd Preserve Wetlands Addition 2014" project is described more completely in a separate environmental review document available from the contact named at the end of this document.

2. Project Background

a. History and Existing Conditions

Sanitary sewers and wastewater treatment plants function optimally within a range of flows of sanitary sewage only. Additional clear water flows, whether from downspouts, leaky manholes, or other connections to sewers (inflow) or from ground water entering cracks in the sewer (infiltration), can exceed the capacity of the sewers and wastewater treatment plant This causes operational problems, basement backups and/or the discharge of untreated wastewater to surface water via regulating structures (regulators) and CSO outfalls. Overflows threaten human and stream health by adding pathogens, bacteria, oxygen-demanding pollutants, suspended solids, nutrients, toxics and floatable matter. Akron has completed and is preparing additional projects to line or replace sanitary sewers and manholes in poor condition to minimize infiltration and inflow (I/I) in the system and thereby help minimize CSO events.

Combined sewers were constructed in Akron until the city required separate storm and sanitary sewers after 1921. The combined sewer system originally had 41 regulators and 37 CSO outfalls in the older, central core of the City of Akron. Dry weather flows are intercepted at the regulators and transported through gravity interceptor sewers to the WRF. Overflow structures discharge to the Ohio Canal, the Little Cuyahoga River, Camp Brook, and the Cuyahoga River.

Recent decades have seen multiple studies and evaluations of the Akron sewer system and WRF, as well as planning for and construction of improvements to the sewer system and wastewater treatment. A 1995 "CSO System Wide Study" concluded that the physical conditions of streams receiving CSO discharges would prevent the full attainment of their Ohio EPA aquatic life use designations even if all CSOs were eliminated. The 1998 "CSO System Wide Study," "Facilities Plan '98," and "Facilities Plan '98 Alternatives" increased the city's understanding of CSOs and presented alternatives for water quality improvement through controlling CSOs. These reports led to the "Long-Term Control Plan '98" (LTCP) that, with revisions and updates, has guided

Akron's multiple projects to eliminate CSOs.

In 2008, Akron, the U.S. EPA, and the Ohio EPA reached an agreement that was rejected by the federal judge in Akron. The agreement was later modified and formalized in a federal Consent Decree (CD) in 2009. The Consent Decree requires full operation of the Ohio Canal Interceptor Tunnel (OCIT) by December 31, 2018 and specific actions to control all CSOs, by October 15, 2028.

The CD specifies a "typical year" statistical design standard for the CSO controls. The "typical year" standard is based on statistical averages and extremes of local stream flow and precipitation records from 1994. The Consent Decree allows each CSO, with controls in place, to overflow a set average number of times per year. All CSOs in the CD are controlled to zero overflows in the typical year, except for the tunnel which is controlled to no more than 7 untreated overflows in the typical year until an Enhanced High Rate Treatment System is constructed later per the CD schedule to treat these 7 overflows.

To prepare for the construction of the OCIT, Akron built CSO storage basins and related improvements and rehabilitated part of the Little Cuyahoga Interceptor (LCI) sewer, the main sewer transporting sewage from east Akron and south Akron toward the WRF. This portion of the LCI will carry flows from the OCIT. Rehabilitation of the 80-year old LCI involved inserting prefabricated liners to restore structural integrity and minimize I/I to restore optimal capacity.

b. Population and Flow Projections

The project drainage areas are developed and Akron expects no significant population or economic growth in the project drainage area. The existing sanitary sewers are appropriately sized for the present and expected future flows in accordance with the approved Clean Water Act Section 208 facilities plan (a regional approach for ensuring cost-effective sewage collection and wastewater treatment).

c. Water Quality

The Little Cuyahoga River is designated Warmwater Habitat (WWH) Aquatic Life Use in the Ohio Water Quality Standards. WWH streams are capable of supporting and maintaining a balanced, integrated, adaptive community of warmwater aquatic organisms common to healthy streams in Ohio. The river does not meet its WWH designation, due largely to urban runoff, channelization, and combined sewer overflows.

The Ohio Canal in the project area is tributary to the Little Cuyahoga River and designated Modified Warmwater Habitat (MWH) except where it is enclosed and designated Limited Resource Water (LRW). MWH streams are incapable of supporting and maintaining a balanced, integrated, adaptive community of warmwater organisms due to irretrievable modifications of the physical habitat (in this case, the canal is an

artificial stream lacking natural stream characteristics). LRW streams lack the potential for any other aquatic life use designation habitat due to natural background conditions or irretrievable human-induced conditions (in this case, part of the canal is underground).

The Ohio Canal receives the greatest volume of combined sewer flow while the Little Cuyahoga River receives the largest number of discharge events. These discharges contribute to serious water quality impacts in the Cuyahoga River and Little Cuyahoga River, including stream discoloration, odor, debris and litter, dissolved oxygen depletion, biological impairment, excessive bacteria levels and exceedences of chemical criteria, including acutely toxic concentrations of heavy metals.

The impact of combined sewer overflows varies with rainfall, stream flow, and overflow frequency. Frequent overflows into low stream levels may have greater biological impacts than an overflow that operates a few times per year at very high stream flows.

3. Discussion of Feasible Alternatives

Based on the LTCP that identifies all of the CSO control measures, performance, and design criteria, and on the milestone schedule dates in the Consent Decree, Akron evaluated alternatives to develop overflow controls identified in the Consent Decree. For the sanitary sewage collection system (sewers), Akron evaluated pump station modifications (to increase wet-weather pumping capacity and move more water faster to the Water Reclamation Facility), regulator modifications (to minimize the volume of combined flows discharged), sewer separation (to exclude storm water from the collection system so pipes carry only sanitary flows), express sewers (to carry flow from collection systems with separate sanitary and storm sewers directly to the main trunk sewer without adding flow to downstream combined sewers), and flow diversion (routing wet-weather combined sewer flows to storage basins). Because inaction on the federal CD could result in significant fines and because ongoing CSO pollution creates human and environmental health risks, doing nothing (the "no-action" alternative) is not feasible.

The proposed OCIT, which will convey sanitary flows in dry weather and temporarily store significant amounts of combined flows in wet weather (functioning much like a storage basin), is specifically required in the Consent Decree.

Recent successes with green infrastructure (extensive use of rain gardens, constructed wetlands, and / or storm water retention basins) to improve water quality led Akron to more recently consider the possibility of minimizing or eliminating some of the traditional "gray" infrastructure (concrete storage basins and tunnels) planned to eliminate CSOs. A consultant's evaluation of the LTCP as part of Akron's Integrated Planning process suggested some projects could be eliminated or modified while providing the same water quality benefit at lower cost. Akron in 2015 is negotiating with the U.S. EPA, Ohio EPA, and the Department of Justice to implement affordable

solutions including "green" alternatives for some CD projects through the Integrated Planning process. The OCIT is a Consent Decree project that will be constructed as planned.

4. Selected Alternative

Akron proposes construction of a sanitary and combined sewage tunnel conveyance and storage system to eliminate CSOs from nine racks in the downtown area as required by the Consent Decree. The LTCP requires diverting the storm flow that is tributary to Racks 4, 37, 16, 17, 18, 19, 20, 23, and 24 to proposed diversion structures into the OCIT, a new tunnel that will be approximately 6,240 feet in length with a finished inside diameter of 27 feet. The general alignment is south to north, from the upstream end at the OCIT-3 Drop Shaft near West Exchange Street / Canal Park to the Tunnel Diversion Structure / Little Cuyahoga Interceptor north of Hickory Street at the Little Cuyahoga River (Figure 1).

Several major diversion structures and consolidation sewers are necessary for the OCIT to convey near-surface flows to the drop structures from the tributary sewers (OCIT-1CS, to be constructed concurrently with a separate contract, and OCIT-2, OCIT-3, Innerbelt Drop Shaft, and Rack 19 Drop Shaft, all part of the OCIT construction contract). Appropriately designed drop shafts minimize the amount of air released into the tunnel from each shaft, dissipate energy and turbulence of the falling water, minimize odor potential, and provide effective maintenance access.

Diversion structures will be constructed near the existing racks to divert dry and wet weather flows to the OCIT. Dry weather flow will be conveyed through the tunnel to the LCI, which takes the wastewater to the WRF.

Overflows from the downtown sewers that now discharge to the Ohio and Erie Canal will be stored in the OCIT. Wet weather flow that exceeds the total available tunnel storage volume will discharge to the Little Cuyahoga River after passing through the Tunnel Diversion Structure located at the downstream end of the OCIT. Total storage capacity will be approximately 26.7 million gallons (MG), exceeding the Consent Decree requirement of 25.6 MG.

The maximum annual overflow frequency allowed for the OCIT is seven times (based on the statistical 1994 typical year flows). The tunnel will dewater by gravity to the Little Cuyahoga Interceptor and, under high flow conditions, overflow by gravity to the Little Cuyahoga River through the OCIT Overflow Culvert. Future construction will add a proposed enhanced high rate treatment system as required by the Consent Decree to treat all untreated overflows up to the typical year prior to discharge to the river.

A "value engineering" review of the original design for construction efficiency and cost-savings resulted in realignment of the OCIT to maximize tunneling in rock (versus rock and soil) and eliminate one consolidation sewer.

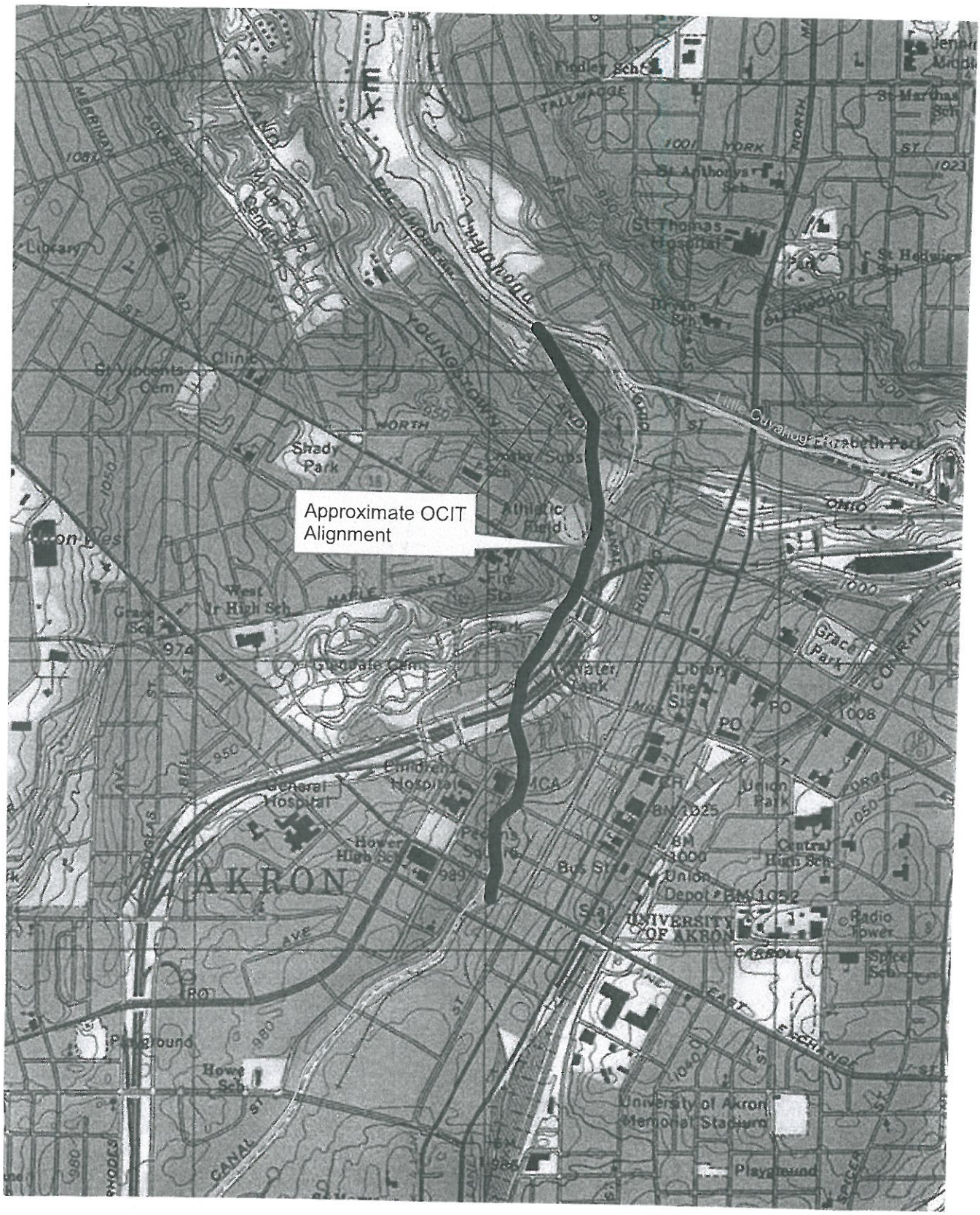


Figure 1 – OCIT General Location

Size and slope of the tunnel are designed for a minimum of 2 feet per second flow velocity to minimize solids deposition and related maintenance efforts and odor potential.

The OCIT-1 Drop Shaft is adjacent to the TDS, and conveys the dry weather and wet weather flow down to the bottom of the TDS from the Rack 20, Rack 23, and Rack 24 drainage basins through the OCIT-1 Consolidation Sewer from the Hickory Street Junction Chamber, which is part of the OCIT-1CS project.

The Innerbelt Drop Shaft conveys the dry weather and wet weather flow from the near-surface Rack 19 Diversion Structure to the Rack 19 Consolidation Sewer.

The Rack 19 Drop Shaft conveys the dry weather and wet weather flow from the Rack 4 Diversion Structure, which conveys the dry weather flow from connections upstream of Rack 4, and the Ohio Canal Interceptor (OCI) Connection Sewer, which conveys flow from Rack 37, to the Rack 4-19-37 Consolidation Sewer.

The OCIT-2 Drop Shaft conveys the dry weather and wet weather flow from the near-surface Rack 18 Diversion Structure and the Rack 4-19-37 Consolidation Sewer to the OCIT.

The OCIT-3 Drop Shaft conveys the dry weather and wet weather flow from the near-surface Rack 16 and Rack 17 Diversion Structures and the Rack 38 Underflow Connection to the OCIT.

Flow out of the downstream end of the OCIT will be controlled at the TDS. Dry weather flows and relatively smaller wet weather flows are conveyed through the TDS to the LCI. Based CSO system modeling, real-time outlet control from the TDS is necessary to limit overflows at the Cuyahoga Street Storage Facility (CSSF) and limit the impact to WRF operations. The maximum outlet flow from the TDS to the LCI at any time is 150 MGD. Two 48-inch diameter pipes are used for the outlet, one as the main line and the other as a backup. Each pipe will have a knife gate to provide isolation for maintenance, a plug valve to control the flow rate, and a magnetic flow meter to measure the flow rate.

The OCIT Control Building is a surface structure providing enclosed space for the control equipment, flow meters, and control valves in the connection line to the LCI, a standby generator, and the break tank booster pump station that supplies water to the yard hydrants on the OCIT-1site. The standby generator provides power to the meters and valves to maintain operation in the event of a power outage and prevent an uncontrolled discharge to the LCI.

Wet weather flows conveyed to the Tunnel Diversion Structure that exceed the allowable flow rate to the LCI will be stored in the OCIT. When flow into the LCI declines, the volume stored in the OCIT will drain through a single 48-inch line at the allowable flow rate to the LCI. When excess wet weather flow is discharged to the Little

Cuyahoga River, baffle weirs will trap floatables that will be carried to the WRF. The Tunnel Diversion Structure design includes a knock-out panel for connection to the future enhanced high rate treatment system.

The Tunnel Diversion Structure and Overflow Culvert are designed to minimize impacts to the natural flow of the Little Cuyahoga River. The project includes both a temporary construction bridge over the river and a permanent maintenance access bridge, and river enhancements to reduce or protect against potential scour of the river banks due to increased turbulence from the overflows. Improvements include removal of a low-head dam immediately upstream of the Overflow outfall, and planned restoration of the river including construction of in-stream riffles for stability, and bioengineering of the steep, eroded streambanks by regrading and planting with native plants.

Incorporation of odor control facilities will depend on airflow modeling in the drop shafts and tunnel, hydrogen sulfide field data, and conceptual designs in a forthcoming Odor Control Facility Plan. The plan will set a strategy for odor control if odor becomes a problem when the OCIT is in use.

Akron in 2014 relocated a 36-inch diameter water main away from the OCIT construction alignment.

5. Project Implementation

Construction companies pre-qualified for this project by Akron bid on the OCIT contract in August 2015. For the OCIT, Akron will borrow approximately $184,100,750 from the WPCLF at the standard interest rate (now 2.44% for an extended term 30-year loan; the rate is set monthly and may change before loan award). In exchange for sponsoring the "Kitty Todd Preserve Wetlands Addition 2014" WRRSP project, Akron's OCIT loan will receive an interest rate reduction of 0.01%. Additionally, interest that otherwise would be charged to the wastewater loan will be advanced back to Akron to pay for the WRRSP project. During the 30-year extended term loan period, Akron will save approximately $69,600,000 by financing the project through the WPCLF at this rate with the WRRSP discount, compared to the market rate of 3.69%.

Akron has instituted a multi-year rate increase to pay for the numerous, sequential projects required by the federal Consent Decree and other sewer system projects.

Construction of the OCIT will start in late 2015 and be completed by the end of 2018. The $7,000,000 OCIT-1CS loan award is scheduled for December 2016; construction will begin in early 2017 and be completed in 2018. Akron will save approximately $1,800,000 by using WPCLF dollars for the OCIT-1CS project compared to a market rate loan.

Four shafts will be excavated along the OCIT alignment from the ground surface to the bottom of the main tunnel or new connecting sewers. Shaft depths will range from

about 65 feet to 150 feet. The excavations will extend through soil and then into bedrock. The soil will be excavated using typical earthmoving equipment. Below the soil, blasting will break the bedrock for removal.

Tunneling will start at the north (downstream), shallow end of the project and proceed southward toward downtown Akron. A three-story tall tunnel boring machine (TBM) will bore a tunnel 30 feet in diameter through 800 feet of soil then through 5,400 feet of bedrock. The 400-foot long, laser-guided machine will work around the clock grinding rock or soil into a slurry, pushing the "tunnel muck" to a conveyor for removal, and installing pre-cast concrete sections to form a permanent tunnel. Concrete grout pumped between the concrete tunnel and the excavated surface will seal and support the tunnel. Approximately 10 months of excavation will produce 6.7 million cubic feet of material that will be transported by the contractor to a properly permitted location or locations. At the southern terminus, the tunnel boring machine will be disassembled below ground and moved to the surface piece by piece through the OCIT-3 Drop Shaft.

C. **Environmental Impacts of the Proposed Project**

This project could directly affect environmental features. Because the OCIT is designed to solve existing problems in Akron's combined sewer system, rather than provide additional capacity in the wastewater system for growth, the project is not expected to lead to new development or associated indirect or cumulative impacts.

Major land forms, and agriculture will be unaffected by this project in an urban area lacking farmland. Because most of the new infrastructure will be underground, land use will change minimally and only for the footprints and exposed faces of the Tunnel Diversion Structure and the OCIT Control Building near the Little Cuyahoga River on undeveloped land adjacent to the LCI and the Cuyahoga Valley Scenic Railroad and Ohio and Erie Canal Towpath Trail.

Removal of the low-head dam, construction of the new bridge, stream and streambank restoration and stabilization, and construction of the OCIT Overflow outfall will minimally affect the Little Cuyahoga River floodplain and OCIT-3 construction will minimally affect the Ohio and Erie Canal designated floodplain in downtown Akron. The City of Akron, which administers the National Flood Insurance Program in the city limits, has determined that the proposed construction will not significantly alter flood levels and has authorized local floodplain development permits for the project.

No regulatory wetlands are in the project disturbance area. Unavoidable construction impacts to the Little Cuyahoga River, a federally-regulated navigable water of the United States, are authorized by U.S. Army Corps of Engineers Nationwide Permits (NWP) 7, 13, and 33, based on conclusion by the Corps that the construction would have no unacceptable environmental effects. The NWP 7 (Outfall Structures and Associated Intake Structures) applies to the OCIT Overflow outfall to the Little Cuyahoga River. NWP 13 (Bank Stabilization) applies to the engineered stabilization of the Little

Cuyahoga River bank at and adjacent to the OCIT Overflow, and NWP 33 (Temporary Construction, Access, and Dewatering) applies to the Little Cuyahoga River stabilization and streambed and bank restoration. Construction of the temporary and permanent bridges over the Little Cuyahoga River and of the OCIT and R4-19-37 sewer at two locations under the Ohio Canal is authorized by NWP 12 and 14.

A mussel survey in the vicinity of the proposed OCIT outfall in the Little Cuyahoga River found no mussels. Because the construction completion schedule requires possible in-stream work in warm weather, Akron requested and received a waiver from the standard in-water work restriction period (avoidance of in-water work from April 15 through June 30 to preclude adverse impacts on spawning, nursery, and feeding activities of native fish species).

To minimize stormwater runoff and transport of eroded soil particles into the Little Cuyahoga River and Ohio and Erie Canal, contractors will adhere to the project's Storm Water Pollution Prevention Plan and Construction Storm Water General Permit from Ohio EPA. The combination of erosion and sediment controls (silt fence, project staging, removal from streets of mud from construction vehicle tires, etc.) and protective measures in the NWPs will minimize adverse construction impacts to area aquatic habitats and surface water resources.

No significant terrestrial habitat is in the construction disturbance area, which is predominantly urban, featuring structures and roadways. A bat survey by Akron's consultants in the wooded areas along the Little Cuyahoga River found no individuals of either the endangered Indiana bat or threatened northern long-eared bat. The U.S. Fish and Wildlife Service confirmed the results and authorized seasonal clearing (removal of trees in the construction disturbance area between October 1 and March 31) to avoid adverse effects to federally-listed species. The construction disturbance area lacks habitat suited to the threatened northern monkshood or the species of concern bald eagle.

Deep tunnel construction is likely to encounter ground water, which will be removed from work areas by dewatering and discharged to the city's combined sewer system and to the Ohio and Erie Canal or Little Cuyahoga River. Dewatering will have no effect on local water supply because no water supply wells or ground water supplies are in the project vicinity.

Summit County meets standards for five of the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter). Summit County and some neighboring counties exceed the ozone standard and are subject to annual motor vehicle emissions testing to reduce volatile organic compounds (VOCs) that form ground-level ozone (smog). Although the OCIT will operate by gravity and includes no sources of air pollutants, temporary, insignificant increases in fugitive soil dust (controlled by water spraying or application of other benign suppressants) and local air pollution from construction vehicle exhaust (similar to that of vehicles regularly transiting

the area) are expected.

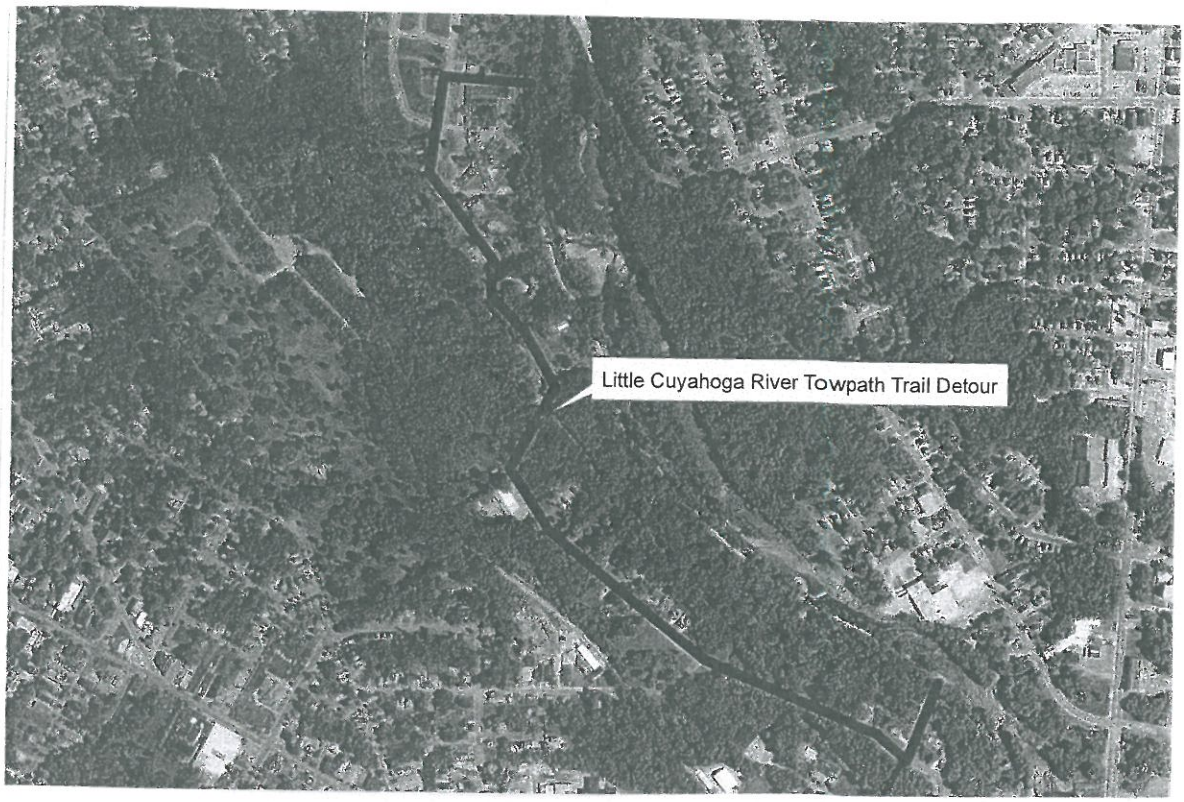
Contractors will ensure that dust suppression in the tunnel prevents excessive dust that could reach otherwise reach explosive levels. Tunnel muck stockpiles will be kept wetted to avoid fugitive dust that could contain silica particles, and trucks removing muck for disposal will be covered to prevent dust from escaping. With these protections in place, the project should have no significant adverse short-term or long-term impacts on local or regional air quality.

Contractors will install and maintain exclusion fencing around active work areas to help ensure public safety. Because the project requires underground blasting, property owners within a 1,000-feet radius of a blasting zone will be notified by door-hangers ahead of blasting. Because local shale sometimes contains methane, the project is considered "potentially gassy" and includes constant monitoring for explosive gases in the tunnel and safety features and planning for workers.

Limited construction will occur in roads and construction vehicles will periodically interfere with normal traffic. Traffic will be maintained except for unavoidable periodic closures and detours marked by barrels, barricades, signs, and flaggers. The heavily-used Ohio and Erie Canal Towpath Trail passes through part of the active construction zone at the downstream terminus of the OCIT and at the upstream end near OCIT – 3. The trail will be relocated in those areas for the duration of construction, with signed and engineered detours on Hickory Street and Main Street (Figure 2). Because these changes are temporary and managed, they are not considered significant.

Local aesthetics will be little altered by this project after its completion because the OCIT and most appurtenances will be underground and the surface will be restored to pre-construction conditions and / or landscaped. The presence of the maintenance access bridge and the above-ground Tunnel Diversion Structure and OCIT Control Building near the Little Cuyahoga River, and the absence of trees in that area, will be the main changes to the post-construction and post-restoration landscape. Landscaping around the Control Building will mitigate some of the unavoidable tree loss. The Towpath Trail will be re-established near its original alignment and re-opened to public use. Because these changes will be well-mitigated, they are not considered significant.

Neighborhood opposition to a proposed above-ground combined flow storage basin near the TDS, due to concerns about aesthetics and odors, convinced Akron to eliminate the basin and increase the diameter of the tunnel to increase tunnel storage capacity accordingly. The forthcoming Odor Control Facility Plan will be the basis for determining if operation of the tunnel produces offensive odors and what controls would be added if that occurs. Implementation of necessary odor controls will mitigate for offensive odors and ensure odor is not significant.



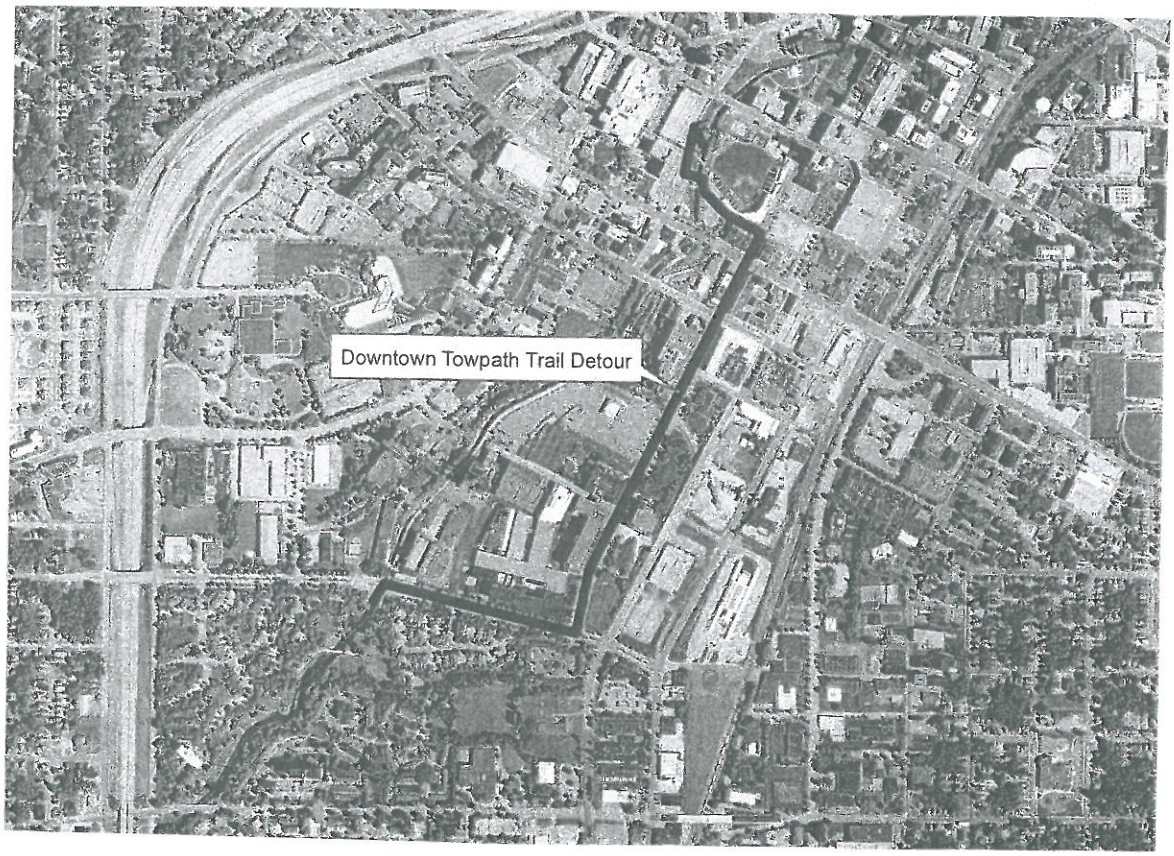


Figure 2 – Canal Towpath Trail Detours

Construction noise from vehicle engines will be audible at and near work locations. Truck traffic, and the sound of trucks transiting area roads near the tunnel entrance for transporting tunnel spoil, will be evident for the duration of construction, when traffic and noise will return to pre-construction levels. Noise will be managed in accordance with the contract documents.

Because the OCIT and associated infrastructure will function by gravity, the only energy consumption will be from the OCIT Control Building's electrical equipment (control, flow meters and recording, control valves in the connection line to the LCI, the break tank booster pump) and fuel for testing and infrequent operation of the standby generator. The electricity demand from this facility is insignificant and will have no effect on local or regional energy supplies

Akron experienced significant growth from the construction and opening of the Ohio and Erie Canal in the 1830s and has maintained significant canal-related history in place-names, historic structures, and portions of the canal itself. CSO outfalls in downtown Akron drain to the canal, and portions of some sewers were constructed in the canal channel and buried after the 1913 flood destroyed much of the canal in Akron and elsewhere. The Akron innerbelt and other contemporary urban development overlies part of the original canal (and sewers), now buried beneath fill soil. Multiple historical and archaeological surveys prepared for this project and regular coordination between the city's project managers, consultants, National Park Service, local historic preservation groups, and the State Historic Preservation Office (SHPO) led to project modifications and inclusion of an "unanticipated discovery" clause and pre- and post-construction surveys to document existing conditions of selected houses, structures, buildings, and other facilities located near the proposed construction.

The unanticipated discovery clause in the plans requires contractors to cease work if historical or archaeological artifacts or remains are encountered. The unanticipated discovery clause is similar to the provision in Ohio Revised Code Section 149.53 that requires contractors and subcontractors to notify the State Historic Preservation Office of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will resume only after a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

The structure surveys will document existing interior and exterior structural conditions of all historic structures and other selected features in the proposed Construction Zone of Influence where tunneling and blasting or vibratory/impact equipment will be used, to determine if structural damage due to construction has occurred.

If the surveys find evidence of damage, or if a property owner believes that the construction activities have caused damage to their historic structure, Akron representatives and the contractor will determine if the damage appears to have been caused by the construction activities. The Contractor will remedy, at its own cost and

expense, all damage or loss to the property. Repairs will follow U.S. Department of Interior guidelines for the rehabilitation or repair of historic structures and be completed by a specialty contractor with at least five years of experience working with repairs following the Department of Interior guidelines.

Based on information in the reports and coordination with Akron, OHPO has concluded that this project will not cause a significant adverse effect to properties listed or eligible for listing in the National Register of Historic Places (cultural resources).

The typical residential annual sewer bill in Akron and served communities is $1,150, which is approximately 2.64% of local median household income (adjusted MHI; $43,563). This cost is higher than the Ohio average residential sewer bill of $606, which is 1.3% of state MHI ($48,081). By using the WPCLF low-interest financing for this project, Akron has minimized the cost and the economic impact on residents and the local economy of this public health and water quality improvement project. Based on this, the projects are considered affordable despite the relatively high average annual sewer bill as a percentage of MHI. The selected bid was approximately $68,000,000 less than the engineer's estimate, further reducing previously projected rate increases. More than 35% of the project labor will be provided by Akron residents.

D. **Public Participation**

OCIT project information has been presented to the public over several years in multiple formats and forums. It was included in the City of Akron 2012 Capital Investment and Community Development Program, has been mentioned in local newspapers regularly, and discussed in meetings with affected agencies, organizations, and residents, as follows:

August 2013 – Ohio Erie Canalway Coalition, Cascade Locks Park Association, Metroparks Serving Summit County, Cuyahoga Valley National Park;

September 2013 – letter to residents of Hickory, Otto, and Cuyahoga streets in vicinity of OCIT construction;

October 2013 – city presentation on the OCIT project to the regular Downtown Akron Partnership Block Watch meeting;

October 2013 – letter to city from residents of Hickory, Otto, and Cuyahoga streets opposing proposed siting of the proposed combined sewage retention basin in the neighborhood;

November 2013 – letter from city and announcement of December meeting to discuss the elimination of the proposed combined sewage storage basin due to engineering challenges, escalating costs, and public input;

June 2015 - OCIT project outdoor stage presentations during the lunch hour downtown covering the tunnel boring machine, canal towpath rerouting, and downtown traffic detours.

The city's "Akron Waterways Renewed!" webpage: http://akronwaterwaysrenewed.com carries ongoing updates on public meeting opportunities and communication.

Ohio EPA will make a copy of this document available to the public on its web page http://epa.ohio.gov/defa/ofa.aspx#169638769-wpclf-documents-for-review-and-comment.

The following agencies reviewed this project's planning information:

Ohio Environmental Protection Agency
State Historic Preservation Office
Ohio Department of Natural Resources
Ohio Department of Transportation
U.S. Army Corps of Engineers – Buffalo District
Metroparks Serving Summit County
U.S. Fish and Wildlife Service
Cuyahoga Valley National Park

None of the review agencies opposes the project. Ohio EPA is unaware of significant controversy about or opposition to the project.

E. **Reasons for a Preliminary Finding of No Significant Impact**

Based on its review of general plans, detail plans, and other information collected about this project, Ohio EPA concludes that no significant short-term or long-term adverse direct environmental impacts will result from the project as related to the environmental features discussed in this Environmental Assessment. This is because either these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts of construction will be temporary and mitigated.

This project equally serves the entire Akron community, so no particular segment of the community will be faced with additional adverse impacts or be deprived of environmental benefits, compared to any other segment.

For these reasons, this project, alone or in combination with other projects, is not expected to result in any significant indirect or cumulative short-term or long-term adverse environmental impacts.

Ohio EPA expects the economic impact of the project on the average user to be acceptable because Akron has lowered the cost and local economic impact as well as ensuring Akron residents will be employed on the project.

The project is expected to eliminate routine combined sewer overflows during the typical year to the Ohio and Erie Canal and the Little Cuyahoga River from combined sewers serving downtown Akron.

For more information, please contact:

Dan Halterman
Ohio Environmental Protection Agency
Division of Environmental and Financial Assistance
P.O. Box 1049
Columbus, OH 43216-1049
(614) 644-3658
daniel.halterman@epa.ohio.gov